

Applicant #: \_\_\_\_\_

Question # I

Answer on these pages, tear from the booklet and submit with the answer

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packet if you chose Option A for Part I of this examination.

Professional Foresters Registration Examination October, 2017

**PART I**

Instructions: APPLICANTS, PLEASE READ THESE INSTRUCTIONS CAREFULLY. You MAY complete PART I by doing ONE of the following two options:

A) Complete the Short Answer Section (Question 1) and Any Two (2) of the Essay Questions (Questions II through V)

**OR**

B) Complete Any Three (3) of the Essay Questions (Questions II through V) and OMIT answering the Short Answer Question (Question I).

Question II - Forest Mensuration

Question III - Forest Ecology

Question IV-Silviculture

Question V - Forest Protection

Professional Foresters Registration  
1416 9th Street, Room 1506-16  
Sacramento, CA 95814

Answer on these pages, tear from the booklet and submit with the answer packet if you chose Option A for Part I of this examination.

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packet if you chose Option A for Part I of this examination.

### ACRONYMS AND ABBREVIATIONS USED IN THIS EXAMINATION

The following Acronyms and /or Abbreviations **may be used** in this examination.

Technical abbreviations that should be known by a forester are NOT included here (e.g. DBH, MAI, MBF). You may remove this page for reference throughout this examination. **It need not be returned.**

<u>Acronym or Abbreviation</u>	<u>Full Text</u>
BLM	Bureau of Land Management, USDI
BOF	California State Board of Forestry and Fire Protection
CCR	California Code of Regulations
CAL FIRE	California Dept. of Forestry and Fire Protection
CDF&W	California Department of Fish and Wildlife
FPR	California Forest Practice Rules
PRC	California Public Resources Code
RPF	California Registered Professional Forester
THP	California Timber Harvest Plan
TPZ	California Timber Production Zone
USFS	United States Forest Service, USDA

FA=Forest Admin, FE=Forest Ecology, FEng= Forest Engineering, FEcon= Forest Economics, FM= Forest Management, FPol= Forest Policy, FP= Forest Protection, FMens = Forest Mensuration, FS=Silviculture

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packet if you chose Option A for Part I of this examination.

**OCTOBER 2017 RPF EXAMINATION  
QUESTION I SHORT ANSWER**

3% 1. Define what is meant by the ecological term, "obligate species".

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3% 2. In the forest, there are likely to be to be life forms other than trees and shrubs. List three (3) life forms of herbaceous plants likely to be found in a forest type in temperate North America (common or scientific names are acceptable).

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3% 3. A plant that is more or less restricted to moist sites, but not considered an aquatic plant is termed a:

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3% 4. As used in ecology, list three causative processes of Evolution.

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3% 5. What is the term for a timber sale in which the buyer and seller agree on a total price for marked standing trees or for trees within a defined area before the wood is removed? —note the timber is usually paid for before harvesting begins.

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3% 6. In the economics of supply and demand, what is a Substitution Effect?

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\_\_\_\_\_  
packet if you chose Option A for Part I of this examination.

3% 7. As used in Forest Economics, define Elasticity of supply and demand.

\_\_\_\_\_  
\_\_\_\_\_

3% 8. If a Public land Survey section has all normal measurements, how many acres are in the NE1/4 NE1/4 SW1/4 SE1/4?

\_\_\_\_\_

3% 9. Briefly define a "blind lead or area" in logging terminology and state the obvious negative environmental result which can occur in that situation.

\_\_\_\_\_  
\_\_\_\_\_

3% 10. Differentiate between a live skyline and a standing skyline system.

\_\_\_\_\_  
\_\_\_\_\_

3% 11. As used in Forest Engineering, what is a Planimetric Map?

\_\_\_\_\_  
\_\_\_\_\_

3% 12. The height above ground or (in some regions) above stump height, to a minimum diameter for a particular product is commonly termed:

\_\_\_\_\_ height.

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3%    13. The Scribner Dec. C log rule differs from the International 1/4" Rule in what basic way?

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3%    14. Define Dendrochronology and the primary way it is applied.

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3%    15. What makes an orthophotograph different from other aerial photographs?

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2%    16. Combustible materials that provides vertical continuity between surface fuels and vegetation strata and allows fire to climb into the crowns of trees or shrubs are commonly called?

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4%    17. Define integrated pest management.

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packet if you chose Option A for Part I of this examination.

3% 18. How do the FPRs describe "good" stand vigor within the definition of Stand Vigor?

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4% 19. What is a forest pest? List three (3) life forms of forest pests.

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3% 20. *An agreement between the Secretary of the Interior and either a private entity or another governmental agency, specifying the conservation that will be implemented in exchange for a permit that would allow the incidental taking of a threatened or endangered species is called a:*

\_\_\_\_\_ (Write out the entire answer, no acronyms).

3% 21. Under the Endangered Species Act (Federal), what does the term "Take" mean?

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3% 22. Briefly, summarize three of the Central Policies of the 2010 (revised 2016) California Fire Plan.

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packet if you chose Option A for Part I of this examination.

3% 23. A written analysis of pre-harvest and post-harvest timber stand conditions and a description of the silvicultural practices and systems to be used in lieu of the standard methods in a Timber Harvest Plan (THP) is termed a:

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4% 24. As used in the FPRs, describe Dunning's Classification. Include at least three (3) tree characteristics used in the classification.

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3% 25. In a THP, what term is used for an area where the use of heavy equipment associated with timber operations is intentionally limited for the protection of water quality, the beneficial uses of water, and/or other forest resources.

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3% 26. The area on which timber operations are being conducted as shown on the map accompanying the Timber Harvesting Plan, and within 100 feet, as measured on the surface of the ground, from the edge of the traveled surface of appurtenant roads owned or controlled by the timberland owner is called the:

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3% 27. A Channel Migration Zone is recognized as being a riparian feature, particularly along fish bearing watercourses, which may contribute to the long-term functions of riparian habitat. Define a Channel Migration Zone.

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packet if you chose Option A for Part I of this examination.

3% 28. As used in the FPRs, what is a Significant Existing or Potential Erosion Site?

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3% 29. The marking of the most commercially valuable trees for cutting under an individual tree marking regime is normally termed:

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4% 30. As used in the FPRs, what is a Road Management Plan? What road management activities does it address?

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3% 31. As used in the FPRs, what are Late Succession Forest Stands?

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4% 32. As used in the FPRs, what is a Countable Tree? List three (3) of the required criteria for acceptable Countable trees.

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**END OF SHORT ANSWER QUESTION AND ANSWERS**



## QUESTION II - FOREST MENSURATION

### OBJECTIVE:

To determine your ability to perform certain mensurational tasks.

### SITUATION:

As an RPF, the Small Tree Land and Timber Company hires you. You are directed to examine and report on a tract of timberland that will soon be available for purchase. The legal description of each parcel is shown below:

All of the Following are in T10N, R12E, Anywhere B & M

1. All of Section 15
2. All of Section 16
3. N  $\frac{1}{2}$  Section 22
4. NW  $\frac{1}{4}$  Section 14
5. S  $\frac{1}{2}$  S  $\frac{1}{2}$  Section 10
6. SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  Section 22
7. S  $\frac{1}{2}$  S  $\frac{1}{2}$  SW  $\frac{1}{4}$  Section 21

### QUESTION

10% 1. Assuming that the indicated legal descriptions consists of sections with normal and standard sizes and shapes for the public land survey, plot the ownership on the plat provided on the last page of this exam. Also state what is the total acreage in the tract of land to be examined? **Remove the plat from this question packet and RETURN AND INCLUDE with your answer packet. Be sure to fill in your Applicant Number on the Plat.**

2. Small Tree Lumber Company has requested that you conduct a 100% cruise on each of the parcels listed above that is 80 acres or less; a 20% line-plot cruise on each area that is greater than 80 acres but less than 1/2 section; and a 10% line-plot cruise on each parcel of 1/2 section or greater.

10% a. What is the number of sample plots required if your sampling unit is a 1/4-acre circular plot in:

- 1) Section 15?
- 2) Section 14?

10% b. If your plots are on 2.5-chain spacing between plots, what is the spacing between lines of plots in:

- 1) Section 16?
- 2) Section 10?

3. You decide to localize the volume tables you will be using.

15% a. Briefly describe how a volume table is localized.

15% b. Discuss the advantages of this procedure.

**CONTINUED ON NEXT PAGE**

4. Throughout the area there are openings of anywhere from 2 to 10 acres that support Christmas trees. You recognize that most of the property value is in the timber, but the Christmas tree potential could be another source of income, hence should be accounted for in your report.

5% a. What data would you tally while at the sample plots that will give you the necessary information for Christmas tree management?

5% b. Describe a rapid means of estimating average annual height growth for a Christmas trees species that you are familiar with. Be sure to specify the species that you are discussing.

5. On completion of fieldwork you develop the following gross sample volumes for section 14.

Pine	250 MBF
Fir	500 MBF
Total	750 MBF

15% a. Assuming that stand conditions are relatively uniform across the cruised area, what are the total gross volumes by species in Section 14?

15% b. Is it necessary to make any other calculation or adjustment to these volumes before using them to estimate timber value? If so, what are they and why are they made?

**CONTINUED ON NEXT PAGE**

Applicant No. \_\_\_\_\_ (Must Be Filled in) Question # II  
TYPICAL TOWNSHIP FOR A PUBLIC LAND SURVEY


What is the total acreage in the tract that you will be examining? \_\_\_\_\_

Applicant: The above diagram represents T10N, R12E, Anywhere B & M. You may tear out this page to answer the questions, but this sheet MUST be turned in with your answers and exam.

END OF QUESTION

### QUESTION III-FOREST ECOLOGY

#### OBJECTIVE:

To demonstrate your knowledge of some of the ecological conditions and processes within the forest soil.

#### QUESTIONS:

24% 1. Root diseases can be caused by both biotic and abiotic factors. They are often thought of as detrimental features in the management of forest stands. However, that assumption may not always be correct. Discuss three **beneficial** aspects root diseases may have in the ecology of a forest.

20% 2. Describe damping-off and what role it plays in forest regeneration. Include in your discussion forest and nursery environments as they relate to damping-off, both host and pest species involved, and the biology of the pest.

15% 3. You can often identify fungal-caused root diseases by observing the infected tree's symptoms and signs.

- A. Give the common or scientific names of 3 fungal root diseases found in western US conifers.
- B. What are the differences between symptoms and signs of root disease?

26% 4. For the 3 diseases you listed in question #3, select two (2) and briefly discuss the following:

10% A. For **each** of the two (2) diseases, what specie(s) of trees are most commonly attacked?

16% B. Give two (2) examples of symptoms and two (2) examples of signs for each of the two (2) common root disease found on western conifer species that you selected in Part A of this question. Note, a total of eight responses are needed.

15% 5. Define mycorrhiza and discuss their function and significance relating to forest trees and artificially grown nursery stock. Be specific.

**END OF QUESTION**

## QUESTION IV FOREST SILVICULTURE

### OBJECTIVE:

To demonstrate understanding of the RPF role in timber harvest plans and Selection silviculture system.

### SITUATION:

As a new RPF you have been approached by an experienced timber buyer who is your "in-law" relative. The timber buyer wants to help you get your consulting business started and asks you to prepare a THP for an 80-acre parcel on site III Sierra Nevada ground, and be the RPF who is available to provide professional advice upon request throughout the active timber operations. The timber buyer shows you a contract showing he purchased all the harvestable timber as lump sum stumpage thus is the timber owner and will be the Plan submitter. There are no listed species, access or difficult ground issues. The timber buyer states the sole requirements of the timberland owner are a Selection silviculture system (not group selection) harvest method and that stocking is met immediately after harvest.

### QUESTIONS:

- 10%     1.     What are the primary attributes of the Unevenaged Selection silviculture system?
- 5%     2.     What are the tree marking requirements in the FPRs when utilizing the Selection harvest method?
- 10%     3.     What are the general responsibilities of the RPF who prepares a THP?
- 10%     4.     What and who is the "real party of interest" in your agreement to prepare the THP?
- 10%     5.     What ethical duty do you owe to the "real party of interest" in your agreement to prepare the THP?
- 15%     6.     Do you owe an ethical duty to any other party concerning the proposed THP project? If so to whom and what is the duty?
- 10%     7.     The timber buyer states his understanding when he purchased the timber is that he would be able to cut all the merchantable trees. He requests that you mark to cut all the sound pines, Douglas-fir and white fir over 17" DBH, and all the sound Incense cedar over 15" DBH while leaving enough smaller trees to meet post-harvest stocking. Since he purchased all the timber as lump sum stumpage he wishes to recover as much value as possible.  
Is this request consistent with the FPRs stocking, seed tree retention and residual tree quality requirements of the Selection regeneration method you will have to meet during the marking of the stand? Explain your answer by addressing details of each of the above three underlined items.
- 10%     8.     The timber buyer states that since he is the plan Submitter and Timber owner, there is no need for you to spend time and money to communicate directly with the absentee Timber land owner. Is that acceptable? Explain your answer.

**Continued on the Next Page**

10% 9. Explain your duty under the FPRs with regards to conflicts of interest between the RPF and real party of interest, timberland owner and other parties to the THP. Give one example of a potential conflict of interest in your agreement to prepare the THP.

5% 10. Explain your duty under the FPRs with regards to newly discovered conflicts of interest during operations under the plan.

5% 11. As a RPF, what must you do if it becomes necessary to discontinue services for this THP?

**End of Question**

## QUESTION V- FOREST PROTECTION

### OBJECTIVE:

To assess your knowledge about insects which can be damaging to wildland tree species in the western United States and Canada.

### QUESTIONS:

Listed below are three (3) insects that are common in forests of the region specified above:

- A. California Five-spined Ips (*Ips paraconfusus*)
- B. Douglas-fir Tussock Moth (*Orgyia pseudotsugata*)
- C. Flatheaded Fir Borer (*Melanophila drummondii*)

45%      1. For each insect, describe and discuss the insect (e.g. the mode by which it affects or damages the host trees, evidence of infestation, factors affecting an outbreak, how a forester in the field could identify the insect using signs and symptoms (assume actual pest not visible). Include host tree species the insect attacks, the portion of the tree attacked, and any other primary indicators of the presence of that species.

30%      2. Insect epidemics in forest stands can possibly be prevented, controlled or lessened through silvicultural-management practices, use of insecticides, or a combination of practices called Integrated Pest Management (IPM). For each of the insects, briefly discuss the most commonly prescribed methods to prevent or control outbreaks of each insect.

25%      3. Assume as an RPF, you determine that insect damage in trees on a tract of commercial timberland warrants immediate harvesting to prevent a loss of tree resources, or there is otherwise a need to control or prevent the build-up of a destructive insect population. Briefly describe the two actions that can be taken under the CA Forest Practice Act and rules that will allow for the harvesting of trees to begin almost immediately (quicker than the time required to get an approved THP). Include what RPF responsibilities exist, if any, in implementing these actions. Assume that commercially merchantable saw logs are present.

END OF QUESTION

**Professional Foresters Registration Examination October 2017**

**Part II**

**Applicant Must Also Answer Three (3) of the Remaining  
Five Essay Questions in Part II**

Question VI-Forest Engineering  
Question VII-Economics  
Question VIII-Forest Administration  
Question IX-Forest Policy  
Question X-Forest Management

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Sacramento, CA 95814



## QUESTION VI-Forest Engineering

### OBJECTIVE:

To demonstrate your understanding of forest engineering activities related to harvesting and associated land management activities.

### QUESTIONS:

1. Tractor, Highlead, Skyline, Cut-to-Length Harvester, and Helicopter Yarding are five of the harvesting systems that may be considered in developing the logging plan for a Timber Harvesting Plan. Consider developing a matrix answer for this question.

15% A. Briefly discuss each of these yarding systems as to their suitability for a partial-cut harvest. Also discuss any terrain limitations that may preclude the system's use or severely limit its use. If certain equipment or techniques are required to do a partial-cut harvest, be sure to describe this equipment. Consider using a matrix to formulate your answer.

20% B. List two (2) ways each logging system might cause potential damage to resources and include one reasonable mitigation of that potential damage.

20% C. For each harvesting system, discuss two (2) advantageous circumstances which would favor that logging system and the relative economic factor(s) which would favor the use of each system for partial cutting.

2. The state of California has a Surface Soil Erosion Hazard Rating system with which RPF's should be familiar.

4% A. State four (4) of the significant factors which are used in the development of the rating.

6% B. Give a brief description of the process for arriving at the rating.

20% C. Assuming a timber harvest unit has an Extreme EHR, give four (4) possible THP Best Management Practices for road design-construction and four (4) possible THP Best Management Practices for harvesting and the choice and implementation of silvicultural methods?

3. Today many forest landowners are implementing Road Management Plans to decrease soil erosion and improve water quality for salmonid habitat.

5% A. Describe what is meant by a "Road Management Plan"

10% B. List and briefly discuss five (5) methods, techniques, or management changes for reducing impacts to beneficial uses of water from roads which are commonly being built into such Road Plans.

**END OF QUESTION**

## QUESTION VII-FOREST ECONOMICS

### OBJECTIVE

To demonstrate your understanding of the economics governing the U.S. forest products industry on a national and international basis.

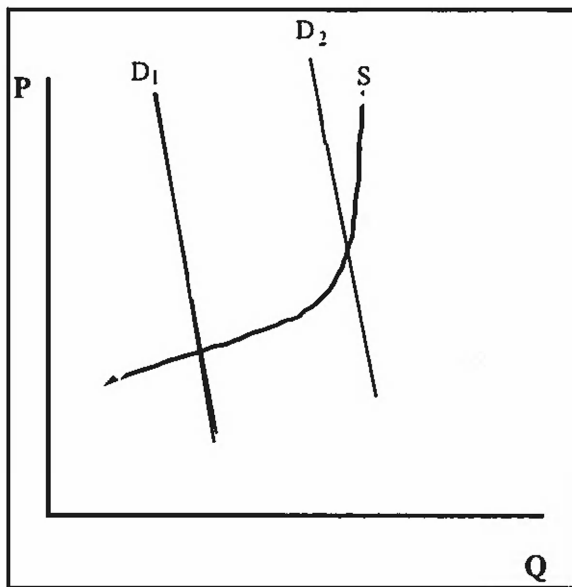
### SITUATION

The forest products industry in the Western United States has long been characterized by cyclical (short-term) instability. **(Note that the question is related to forest products and your answers should be directed towards forest products such as sawn lumber and construction panels, not logs.)**

### QUESTION

- 25% 1.
- 5% 1. a. Explain the main cause of the traditional cyclical instability in the Western forest products industry.
  - 5% 1. b. How does this affect the price of lumber?
  - 5% 1. c. Explain the effects of interest rates and money supply on this instability.
  - 5% 1. d. Many other factors may have a short-term effect on instability in the Western forest products industry. Explain the effect of the abnormally high and increasing housing price escalation of the middle 2000s period affected the Western forest products industry.
  - 5% 1. e. Explain how an unplanned reduction in imports might affect the price of lumber.
- 10% 2. What is meant by the statement "it is generally agreed that demand for lumber, building panels and plywood by the construction industry is 'inelastic'."
- 45% 3. Assume that the graph provided below relates to supply and demand for forest products, answer the following:
- 15% a) For each of the axes and graph lines labeled P, Q, D1, D2, and S, clearly define what each item represents.

CONTINUED NEXT PAGE



15%      b) Explain why the S-graph line changes slope upward so quickly near its intersection with D2.

15%      c) Explain, with the use of the graph, what happens in the forest products market if the economic circumstances are at D1 and then move to D2.

20%      4. List and briefly describe the effects that a forest products industry depression would likely have on the intensity of forest management on industrial forestlands in the West in the short-run.

**END OF QUESTION**

## QUESTION VIII- FOREST ADMINISTRATION

**OBJECTIVE** To demonstrate understanding of the RPF role in reviewing timber harvest plans

### SITUATION

As a new RPF you have been employed to develop comments for submission during review of THPs. Your employer is Lake County. Your first review is a THP proposed for 160 acres of TPZ land in the Northern Forest district. The County is concerned that this project creates a de facto subdivision. The site II young growth sawtimber is located along a minor East to West trending ridge. All the slopes are  $\leq 30\%$ . There are no listed species issues. There are no critical erosion sites. There are no watercourse issues.

The plan access system proposes a reconstructed permanent road at the ridgeline along an existing ranch road, four (4) new permanent mid-slope roads roughly parallel to the ridge road with two roads spaced approximately 10 chains and 20 chains below the ridge on each side of the ridge. Tractor skidding to 0.5-acre landings spaced ~ every 10 chains along each of the four new roads is proposed. There are 16 landings proposed. All roads have 20-foot width design specifications.

Fuelbreak/Defensible Space silviculture is proposed for a 400-foot wide strip straddling the ridge. Elsewhere, group selection silviculture is specified with sixteen two acre roughly square regeneration gaps flagged, one next to each landing. The proposed regeneration gaps are to have tractor pile and burn site preparation and natural regeneration. See plot map on the next page.

The feasibility analysis addressed "no project" and variation in space and time alternatives.

### QUESTIONS:

100% 1. Explain and justify the following comments you propose to submit on behalf of the County.

20% 1.a. The County is concerned that the proposed plan would lead to a future subdivision. This would possibly subvert the County subdivision map act review and approval process.

10% 1.b. The proposed ridgeline road is not necessary.

10% 1.c. All the proposed roads are excessively wide.

10% 1.d. All the landings are too large.

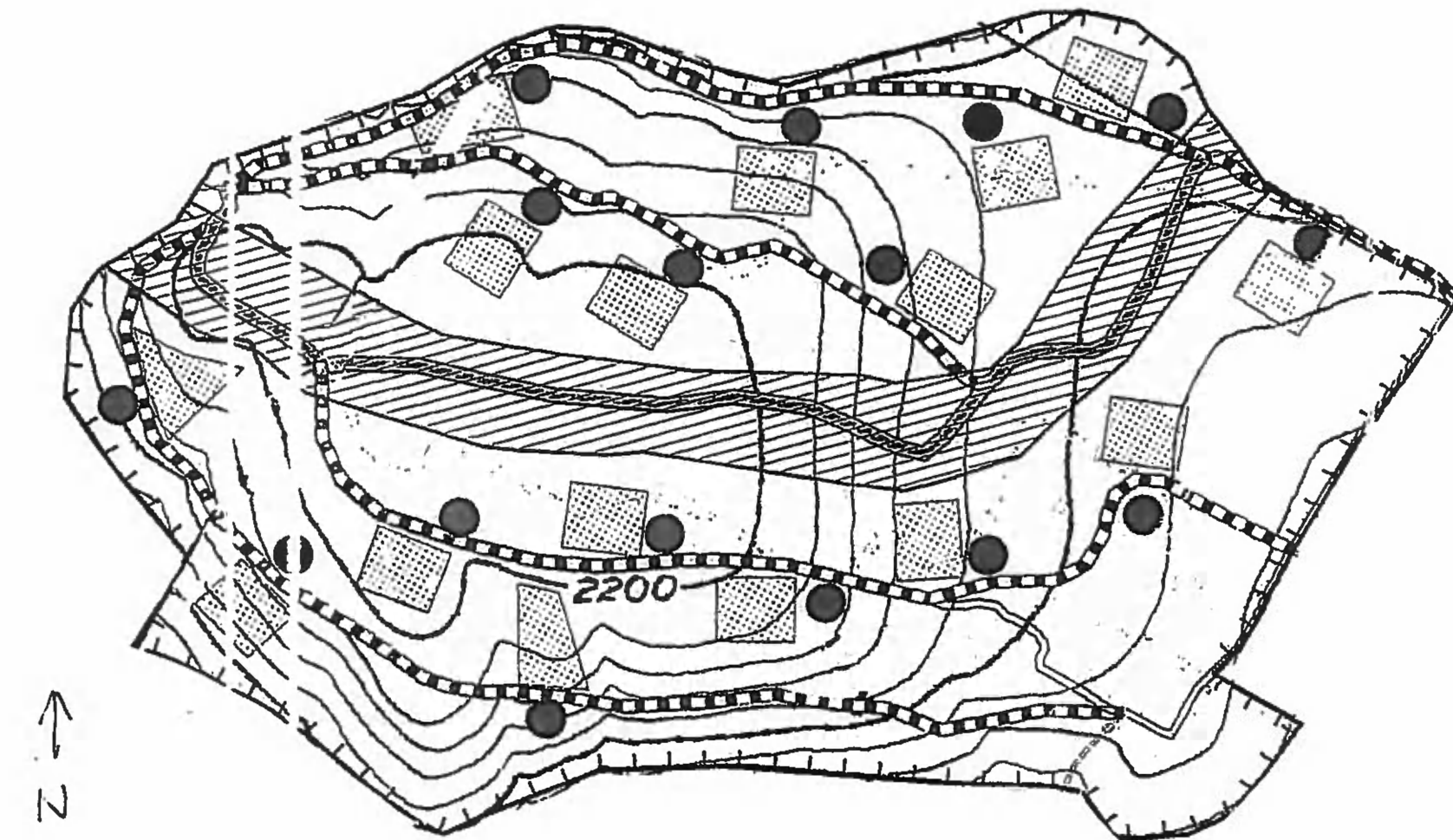
10% 1.e. There is excessive acreage designated for regeneration groups.

10% 1.f. The regeneration gaps are too large for natural regeneration.

10% 1.g. Fuelbreak/Defensible Space silviculture is inappropriate.

10% 1.h. There are significant alternative projects that were not addressed in the feasibility analysis.

10% 1.i. The County will appeal if the THP is approved in its present form.



0 .125 .25 miles

1" = 660'

# **Lake Ridge** **Timber Harvesting Plan**

T12N R6W Sec31 MDB&M

- Harvesting Boundary - Group Selection
- Group Openings
- Fuelbreak/Defensible Space

- Existing Permanent
- Existing Seasonal
- Existing Temporary & 4WD

THP AREA = 160 Acres

- Proposed Permanent
- Reconstructed Permanent
- Proposed Landings

## QUESTION IX- FOREST POLICY

**OBJECTIVE** To demonstrate your awareness of issues which can influence the balance of growth and harvest in sustained yield management decision-making situations.

**SITUATION** As California RPFs, you are required to manage a client's forestland by 14 CCR 913.11, 933.11 or 953.11 that states (in part):

"The goal of this section is to achieve Maximum Sustained Production of High Quality Timber Products (MSP)."

For this question, assume that sustained production is synonymous with sustained yield which is defined as: "the yield of commercial wood that an area of commercial timberland can produce continuously at a given intensity of management consistent with required environmental protection and which is professionally planned to achieve over time a balance between growth and removal".

Many factors and issues that may be classified as physical/biological and social can influence the actual level of sustained yield. These factors can tip the balance toward either the growth or harvest side of sustained yield with resulting changes in residual inventory. Regulatory policies also exert pressures that may tip the balance towards either the growth or harvest side of the sustained yield equation. The costs and benefits associated with timberland ownership also affect the balance of growth and harvest.

### QUESTION

30% 1. LIST five (5) issues that you indicate are physical/biological and five (5) social issues that are pressures or forces that can create an imbalance in the sustained yield equation. Briefly indicate why you consider each issue to be either a physical/biological or social issue.

50% 2. From your list for Question 1, select two (2) social AND two (2) physical/biological issues and discuss in more detail how they create influence the sustained yield equation, the costs and benefits (biological, social, financial etc.), and how you might adjust for that influence over time.

20% 3. A 2016 CalFire publication (**Forest Fire, Drought, Restoration Treatments, and Carbon Dynamics: A Way Forward** David Sapsis. *et al.*) stated: "climate change continues to exacerbate the potential for drought, wildfire, insects, and disease." The report proposes "to promote fewer, but larger tree distributions..." and use "...carbon stability as a guiding principle for ... long-term forest management...."

Discuss how these concepts might influence the sustained yield equation.

### END OF QUESTION

## QUESTION X- FOREST MANAGEMENT

### OBJECTIVE:

To demonstrate your ability to identify the appropriate harvesting document required for tree removal associated with fuel hazard reduction projects on private property in compliance with the Forest Practice Rules.

### SITUATION

There is a range of options available to assist landowners in fuel hazard reduction. These options include exemptions, emergencies and Timber Harvest Plans.

### QUESTION

100% 1. Complete the following two (2) matrices to fully describe the following fuel hazard reduction project options. Please complete both pages for each matrix. Be sure to turn in the completed matrices as they are your answer.

70 % Matrix #1 Exemptions (there are two pages to this matrix).

30 % Matrix #2 Emergency and Timber Harvest Plans (there are two pages to this matrix).

FPR code number references are not required in your answers.

70% 1. Select three (3) exemptions from the following list of seven fuel hazard reduction project exemption options: a. 150' Structure Protection Exemption (14 CCR § 1038(c)) b. Lake Tahoe, 150' - 300' Structure Protection Exemption (14 CCR § 1038(c)(6)), c. Harvesting Dead, Dying, Diseased trees. (14 CCR § 1038(b)), d. Drought Mortality Exemption (14 CCR § 1038(k)), e. Substantially Damaged Timberland (14 CCR § 1038(d)), f. Woody Debris & Slash for Energy Production Exemption (14 CCR § 1038(g)), g. Forest Fire Prevention Exemption 14 CCR § 1038(i)

Enter the selected exemptions in the left column of the following two (2) pages. Complete the other matrix cells to fully describe the following fuel hazard reduction project exemption options: FPR code number references are not required in your answers.

Continued on the Next Page

Applicant No. \_\_\_\_\_ (Must Be Filled in) Question # X

<b>Exemption PERMIT OPTIONS</b>	<b>RPF REQUIRED ?</b>	<b>AREA/ACREAGE LIMITATIONS</b>	<b>SILVICULTURE/ STOCKING</b>	<b>DIAMETER LIMIT</b>	<b>SURFACE/ LADDER FUELS TREATMENT</b>

Continued on the Next Page



Applicant No. \_\_\_\_\_ (Must Be Filled in) Question # X

<b>PERMIT OPTIONS</b>	<b>ARCHAEOLOGY REQUIRMENTS</b>	<b>APPROVAL TIME</b>	<b>EFFECTIVE PERIOD</b>	<b>§ 1038(b)(1-10) OPERATIONS RESTRICTIONS*</b>	<b>OTHER INFORMATION</b>

Continued on the Next Page

- 30% 1. Select two (2) items from the following list of three fuel hazard reduction project Emergency and Timber Harvest Plans options: a. Fuel Hazard Reduction (14 CCR § 1052.4) ,  
b. Modified Timber Harvest Plan for Fuel Hazard Reduction (14 CCR §§ 1051.3 - 1051.7)  
c. Fuelbreak / Defensible Space (14 CCR §§ 913.4, 933.4, 953.4(c))

Enter the selected items in the left column of the following two (2) pages. Complete the other matrix cells to fully describe the following fuel hazard reduction project options: FPR code number references are not required in your answers. Be sure to turn in the completed matrices as they are your answer

Applicant No. \_\_\_\_\_ (Must Be Filled in) Question # X

<i>Emergency Or Timber Harvest PERMIT OPTIONS</i>	<i>RPF REQUIRED?</i>	<i>AREA/ACREAGE LIMITATIONS</i>	<i>SILVICULTURE/ STOCKING</i>	<i>DIAMETER LIMIT</i>	<i>SURFACE/ LADDER FUELS TREATMENT</i>

Continued on the Next Page

Applicant No. \_\_\_\_\_ (Must Be Filled in) Question # X

<b>Emergency Or Timber Harvest PERMIT OPTIONS</b>	<b>ARCHAEOLOGY REQUIRMENTS</b>	<b>APPROVAL TIME</b>	<b>EFFECTIVE PERIOD</b>	<b>§ 1038(b)(1-10) OPERATIONS RESTRICTIONS*</b>	<b>OTHER INFORMATION</b>

END OF EXAM